

**In the Claims:**

Please add new claims 8-11, as set forth below.

1. (Original) A universal breakout harness for reversing the polarity of optical fibers, comprising:

a multi-fiber connector with multiple optical paths formed therein, the optical paths being arranged in a generally planar array with each optical path being immediately adjacent to at least one other optical path;

a plurality of optical fibers of an optical ribbon disposed in the optical paths formed in the multi-fiber connector; and

a plurality of optical fiber connectors disposed opposite the multi-fiber connector, the plurality of optical fiber connectors defining a plurality of pairs of optical paths for receiving the optical fibers of the optical ribbon;

wherein the optical fibers of the optical ribbon are separated and routed between the optical paths formed in the multi-fiber connector and the pairs of optical paths defined by the plurality of optical fiber connectors; and

wherein the optical fibers in at least one of the pairs of optical paths defined by the plurality of optical fiber connectors are selected from optical fibers disposed in optical paths formed in the multi-fiber connector that are not immediately adjacent to each other.

2. (Original) The universal breakout harness of claim 1, wherein at least 80% of the optical fibers in the pairs of optical paths defined by the plurality of optical fiber connectors are selected



from optical fibers disposed in optical paths formed in the multi-fiber connector that are not immediately adjacent to each other.

3. (Original) A method of implementing reverse-ribbon positioning in a cabling system, comprising:

assigning a sequential number to each of the optical fibers of an optical ribbon;

installing one end of the optical ribbon into a multi-fiber connector with the optical fibers of the optical ribbon arranged in sequential number from left to right; and

installing the other end of the optical ribbon into a plurality of optical fiber connectors with the optical fibers of the optical ribbon arranged in reverse sequential number from left to right.

4. (Original) The method of claim 3,

wherein a plurality of optical paths are formed in the multi-fiber connector and arranged in a generally planar array with each optical path being immediately adjacent to at least one other optical path;

wherein a plurality of pairs of optical fiber paths are defined by the plurality of optical fiber connectors; and

wherein the optical fibers installed in at least one of the pairs of optical paths defined by the plurality of optical fiber connectors are selected from optical fibers installed in optical paths formed in the multi-fiber connector that are not immediately adjacent to each other.

5. (Original) The method of claim 4, wherein at least 80% of the optical fibers installed in the pairs of optical paths defined by the plurality of optical fiber connectors are selected from optical fibers installed in optical paths formed in the multi-fiber connector that are not immediately adjacent to each other.



6. (Original) The method of claim 3, wherein the multi-fiber connector has a key oriented in a predetermined direction and wherein each of the plurality of optical fiber connectors has a key oriented in the same predetermined direction.

7. (Original) A method of transitioning ribbon cabling into multiple duplex systems, comprising

providing a first transition module and a second transition module by:

assigning a sequential number to each of the optical fibers of a first optical ribbon;

installing one end of the first optical ribbon into a first multi-fiber connector having a key with the optical fibers of the first optical ribbon arranged in sequential number from left to right and the key oriented in a predetermined direction; and

installing the other end of the first optical ribbon into a plurality of optical fiber connectors with the optical fibers of the first optical ribbon arranged in reverse sequential number from left to right; and

connecting the first multi-fiber connector of the first transition module to a second multi-fiber connector installed on one end of a second optical ribbon having a plurality of optical fibers arranged in a sequential number from left to right, the second multi-fiber connector having a key oriented in the predetermined direction; and

connecting the first multi-fiber connector of the second transition module to a third multi-fiber connector installed on the other end of the second optical ribbon, the third multi-fiber connector having a key oriented in the predetermined direction.

8. (New) The universal breakout harness of claim 1, wherein the plurality of optical fibers are identified by numbers 1 through X, where X is the total number of optical fibers in the optical ribbon, and the optical fibers are attached to the multi-fiber connector in numerical order from 1



through X and are paired for external connection to successive optical fiber connectors: 1 and X, 2 and X-1, etc., until all fibers are paired.

9. (New) The universal breakout harness of claim 8, wherein X is equal to 12.

10. (New) The universal breakout harness of claim 8, wherein six of the optical fiber connectors are present defining six pairs of optical paths.

11. (New) The universal breakout harness of claim 1, wherein the optical fiber connectors include at least one multi-fiber connector.